

Bellwork: 1/8/13

Solve using the quadratic formula:

$$x^2 - 6x + 3 = 0$$

$$a = 1 \quad b = -6 \quad c = 3$$

$$\frac{6 \pm \sqrt{(-6)^2 - 4(1)(3)}}{2(1)}$$

$$\frac{6 \pm \sqrt{24}}{2}$$

$$\frac{6 + \sqrt{24}}{2}$$

$$\frac{6 - \sqrt{24}}{2}$$

$$\frac{6 \pm 2\sqrt{6}}{2}$$

$$(5.4, 0)$$

$$(.6, 0)$$

$$\boxed{3 \pm \sqrt{6}}$$

$6 + \sqrt{24}$ enter

Ans / 2 enter

Page 1

$$\textcircled{11} \quad x^2 - 4x + 3 = 0$$

$$(x - 1)(x - 3) = 0$$

$$x - 1 = 0 \quad x - 3 = 0$$

$$x = 1 \quad x = 3$$

$$(1, 0) \quad (3, 0)$$

$$a = 1 \quad b = -4 \quad c = 3$$

$$\frac{4 \pm \sqrt{(-4)^2 - 4(1)(3)}}{2(1)}$$

$$\frac{4 \pm \sqrt{4}}{2}$$

$$\frac{4 \pm 2}{2}$$

$$\frac{4+2}{2} = 3$$

$$\frac{4-2}{2} = 1$$

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(15) $x^2 + 10x = -25$ $a=1$ $b=10$ $c=25$
 $x^2 + 10x + 25 = 0$ $\frac{-10 \pm \sqrt{(10)^2 - 4(1)(25)}}{2(1)}$
 $(x+5)(x+5) = 0$
 $x+5=0$ $\frac{-10 \pm \sqrt{0}}{2}$
 $x = -5$
 $(-5, 0)$ $\frac{-10}{2} = -5$

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(19) $3x^2 = 2(2x+1)$ $a=3$ $b=-4$ $c=-2$
 $3x^2 = 4x + 2$
 $-4x - 2$
 $3x^2 - 4x - 2 = 0$ -6
 $4 \pm \sqrt{40}$ enter
 $/6$ enter
 $(1.7, 0)$ $(-1.4, 0)$
 $\frac{4 \pm \sqrt{40}}{6}$
 $\frac{4 \pm 2\sqrt{10}}{6}$
 $\frac{2 \pm \sqrt{10}}{3}$

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$$\textcircled{20} \quad 2x(x-1) = 3$$

$$2x^2 - 2x = 3$$

$$2x^2 - 2x - 3 = 0$$

$$\frac{2 \pm 2\sqrt{7}}{4}$$

$$\boxed{\frac{1 \pm \sqrt{7}}{2}}$$

$$\begin{array}{r} 28 \\ 4 \overline{) 28} \\ 28 \\ \hline 0 \end{array}$$

$$\frac{2 + \sqrt{28}}{4}$$

$$(1.8, 0)$$

$$\frac{2 \pm \sqrt{28}}{4}$$

$$\frac{2 - \sqrt{28}}{4}$$

$$(-.8, 0)$$

Homework: Worksheet 5.7

$$\# 1 - 6$$

$$\# 16 - 21$$

